

Get features from temporal wave equation

- If $y = A \sin(Bt) + D$ then
 - amplitude = $|A|$
 - angular frequency = B
 - frequency = $\frac{B}{2\pi}$
 - period = $\frac{2\pi}{B}$
 - offset = D , so midline is at $y = D$
 - If $A > 0$ then at $t = 0$ the wave is at midline and increasing
 - If $A < 0$ then at $t = 0$ the wave is at midline and decreasing
- If $y = A \cos(Bt) + D$ then
 - amplitude = $|A|$
 - angular frequency = B
 - frequency = $\frac{B}{2\pi}$
 - period = $\frac{2\pi}{B}$
 - offset = D , so midline is at $y = D$
 - If $A > 0$ then at $t = 0$ the wave is at maximum
 - If $A < 0$ then at $t = 0$ the wave is at minimum